

IN THE CLAIMS

Please cancel claims 1-171, all of the claims in the application, as filed, as set forth in the verified translation of PCT/EP2005/051234. Please also cancel claims 1-15, as submitted under Article 34 by KBA on March 14, 2006. Please add new claims 172-186, as follows.

Claims 1-171 (Cancelled)

172. (New) A printing machine comprising:

a plurality of independently adjustable machine elements;

a corresponding plurality of setting elements for adjusting said plurality of machine elements to affect a quality of printing performed by the printing machine;

an optical detection device having a sensor that is directed toward a surface of a printing substrate printed in the printing machine for detecting the quality of the printing on the printing substrate, said optical detection device being configured to simultaneously detect two marks or measurement fields, which are arranged crosswise to the direction of transport of the printing substrate, are incongruent in a spacing or at least in their respective positions, and are simultaneously assigned to a same color patch;

a control device that receives data from the optical detection device and uses said setting elements to adjust said machine elements based upon a difference between a quality of the printing that is preset as a target value and a

quality of the printing that is detected by the optical detection device as an actual value using an identified change in the spacing between the two marks or measurement fields, crosswise to the direction of transport of the printing substrate, in a manner that serves to minimize the difference between the target value and the actual value;

wherein, the adjustment of the different machine elements serves to counteract interfering factors having different causes and different temporal behavior or different surface effects on the printing such that when a difference between the target value and the actual value exists, the control device analyzes the data from the optical detection device with respect to the interfering factor causing the difference, its temporal behavior and/or its surface effect on the printing, and initiates the control operations necessary to achieve the quality of the printing to be produced, these control operations acting upon different ones of the machine elements.

173. (New) The printing machine according to claim 172, wherein at least one of said machine elements is a temperature-control device for controlling the temperature of at least a part of a circumferential surface of a rotational body of the printing machine, wherein said rotational body is involved in the transport of a printing ink to the printing substrate being printed with said ink in the printing machine.

174. (New) The printing machine according to claim 172, wherein said control device is configured to implement the process of adjusting said machine elements continuously during the printing.

175. (New) The printing machine according to claim 172, wherein at least the optical detection device, the control device and at least one of said setting elements are connected to one common data bus.

176. (New) The printing machine according to claim 172, wherein said control device is configured to control at least one guide element arranged in the printing machine for guiding the printing substrate during its transport through the printing machine, or regulate said guide element via one of said setting elements, based upon the data provided by said optical detection device.

177. (New) The printing machine according to claim 176, wherein said control device regulates said guide element via a one of said setting elements for the centering of the printing substrate.

178. (New) The printing machine according to claim 172, wherein at least a first of said machine elements acts upon a mechanical technology and at least a second of said machine elements acts upon properties of a material being used in the printing, including a printing ink, wherein, in the event of a difference between the target value and the actual value, the control device utilizes the first

and second machine elements based upon a necessity determined from the data collected by the optical detection device.

179. (New) The printing machine according to claim 172, wherein the control device induces multiple ones of said setting elements and/or machine elements to a joint, coordinated, synergetic reaction on an interfering factor causing the difference in the event of a difference between the target value and the actual value, e.

180. (New) The printing machine according to claim 172, wherein the control device is configured to evaluate different interfering factors identified from the data from the optical detection device in a plurality of parallel process branches.

181. (New) The printing machine according to claim 172, wherein, the control device is configured to use one or more signals to control a web intercept device, based upon the data provided by the optical detection device, when a paper web break is identified.

182. (New) The printing machine according to claim 172, wherein, the control device is configured to use one or more signals to control a web severing device, based upon the data provided by the optical detection device, when a paper web break is identified.

183. (New) The printing machine according to claim 172, wherein the control device is configured to shut down the printing machine based upon the data provided by the optical detection device when a serious interference in a production being implemented with the printing machine is identified.

184. (New) The printing machine according to claim 183, wherein the identified serious interference is a tear in the printing substrate.

185. (New) The printing machine according to claim 172, wherein said control device controls a switch for changing a transport pathway of the printing substrate based upon the data provided by the optical detection device.

186. (New) The printing machine according to claim 185, wherein said switch is configured to feed a printed product identified by the control device to be of good quality to a first delivery and a printed product identified to be of poor quality to a second delivery.